



66129902621

# **OWNER'S MANUAL**

**Models:** 

CCS-24HR4LW

Thank you for choosing this air conditioner for correct operation, please read this owner's manual carefully before operating the unit and keeps it carefully for consultation.



# Operation and maintenance■ Notices for operation.1■ Notices for use.4■ Names and functions of each part.5■ Operation of wireless remote control.6■ Clean and care.9■ Troubleshooting.11Installation service■ Notices for installation.14■ Installation dimension diagram.16■ Install indoor unit.17■ Install outdoor unit.17■ Check after installation and test operation.20



This symbol stands for the items should be forbidden.



This symbol stands for the items should be followed.

Thank you for choosing this air conditioner, please read this owner's manual carefully before operating the unit and keep it carefully for consultation.

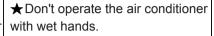


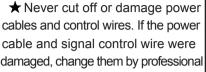
# **Operation and maintenance-Notices for operation**

#### Please read the following carefully before operating.

#### WARNING

★ When having a burning smell or smoke, please turn off the power supply and contact with the service center of CLIMATE CONTROL.









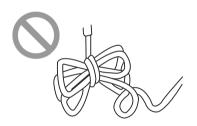
If the abnormity still exists, the unit may be damaged, and may cause electric shock or fire.

Otherwise, it can cause an electric shock or fire.

★Power must adopts the special circuit to prevent fire.

★ Be sure to pull out the power plug as the air conditioner not in use for a long time.

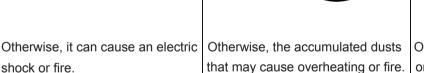
★ Never damage the electric wire or use the electric wire, which is not appointed.





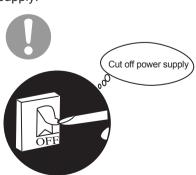






Otherwise, it will cause overheating or fire.

★ When cleaning, it is necessary to stop driving and turn off the power supply.



Otherwise, it may cause electric shock or damage.

★ The air conditioner should be operated with the voltage range that is the rated voltage + 10%, the rated voltage is 220-240V $\sim$ , when the voltage is very low, the compressor vibrates terribly and that will damage the refrigerant system; When the voltage is very high, the electrical component would be easily damaged.

★ The power supply must adopt the special circuit that with air switch protection and assure it has enough capacity. The unit will be turned on or off according to your requirement automatically, please do not turn on or turn off the unit frequently, otherwise disadvantage effect may be caused to the unit.

# **♦**

# **Notices for operation**



★ Earth:The ground be connected!





If not, please ask the qualified personnel to install. Furthermore, don't connect each wire to the gas pipe, water pipe, drainage pipe or any other improper places.

★ Be sure to pull out the power plug when not using the air conditioner for a long time.





Otherwise, the accumulated dust may cause fire or electric shock.

★ Select the most appropriate temperature.

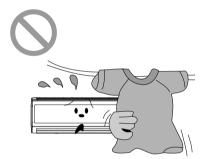


It can preclude the electricity wasted.

★Don't leave windows and doors open for a long time while operating the air conditioner.



★ Don't block the air intake or outlet vents of both the outdoor and indoor units.



It can decrease the air conditioning capacity or cause a malfunction.

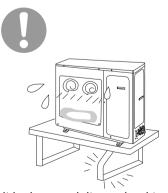
★ Keep combustible spray away from the units more than 1m.



It can cause afire or explosion.

It can decrease the air conditioning capacity.

★Please note whether the installed stand is firm enough or not.



If it is damaged, it may lead to the fall of the unit and cause the injury. ★ Don't step on the top of the outdoor unit or place something on it.



As falling off the outdoor unit can be dangerous.

★ Don't attempt to repair the air conditioner by yourself.



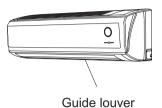
The wrong repair will lead to an electric shock or fire, so you should contact the service center of CLIMATE CONTROL to repair.

# Notices for operation

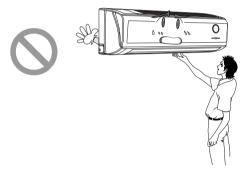
★ The power cords of this air conditioner adopt X-type connection, please don't cut off or damage the power cords and control cords. If they are damaged, please ask the qualified personnel to change them.



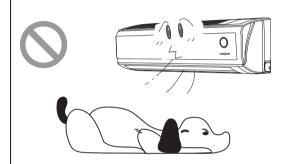
★ To adjust the airflow and direction appropriately At operating the louvers of air conditioner could be adjusted by pressing the SWING button on wireless remote control to change the airflow direction.



★ Don't insert your hands or stick into the air intake or outlet vents.



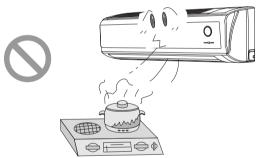
★ Don't blow the wind to animals and plants directly. It can cause a bad influence to them.



★ Splashing water on the air conditioner can cause an electric shock and malfunction.

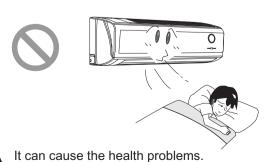


★ Don't place a space heater near the air conditioner.

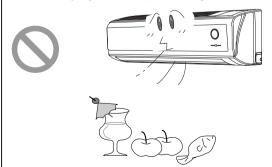


Or CO toxicosis may occur for imcomplete burning.

★ Don't apply the cold wind to the body for a long time.



★ Don't use the air conditioner for other purposes, such as drying clothes, preserving foods, etc.



#### Working principle and special functions for cooling

#### Principle:

Air conditioner absorbs heat in the room and transmit to outdoor and discharged, so that indoor ambient temperature decreased, its cooling capacity will increase or decrease by outdoor ambient temperature.

#### **Anti-freezing function**

If the unit is running in COOL mode and in low termperature, there will be frost formed on the heat exchanger, when indoor heat exchanger temperature decreased below 0°C, the indoor unit microcomputer will stop compressor running and protect the unit.

#### Working principle and special functions for heating

#### Principle:

- \* Air conditioner absorbs heat in the room and transmit to outdoor and discharged, will increase, its heating capacity will decrease by outdoor ambient temperature. so that indoor ambient temperature increased, so room heating capacity.
- \* This heating air circulation system can enhance the indoor temperature in a short while.
- \* If outdoor temperature got lower, please operate with the other heating ventilating equipments.

#### **Defrosting:**

- \* When outdoor temperature is low but high humidity, after a long while running, frost will form on outdoor unit, that will effect the heating effect, at this time, the auto defrosting function will act, the heat running will stop for 8-10mins.
- \* During the auto defrosting, the fan motors of indoor unit and outdoor unit will stop.
- \* During the defrosting, the indoor indicator flashes, the outdoor unit may emit vapor. This is due to the defrosting, it isn't malfunction.
- \* After defrosting finished, the heating will recover automatically.

#### **Anti-freezing function:**

In "HEAT" mode, if in the following status, the indoor heat exchanger haven't achieve the certain temperature, that the indoor unit will not act, in order to prevent cool air blowing. (Within 3mins)

1. Heating starts. 2. After Auto defrosting finished. 3. Heating under the low temperature.

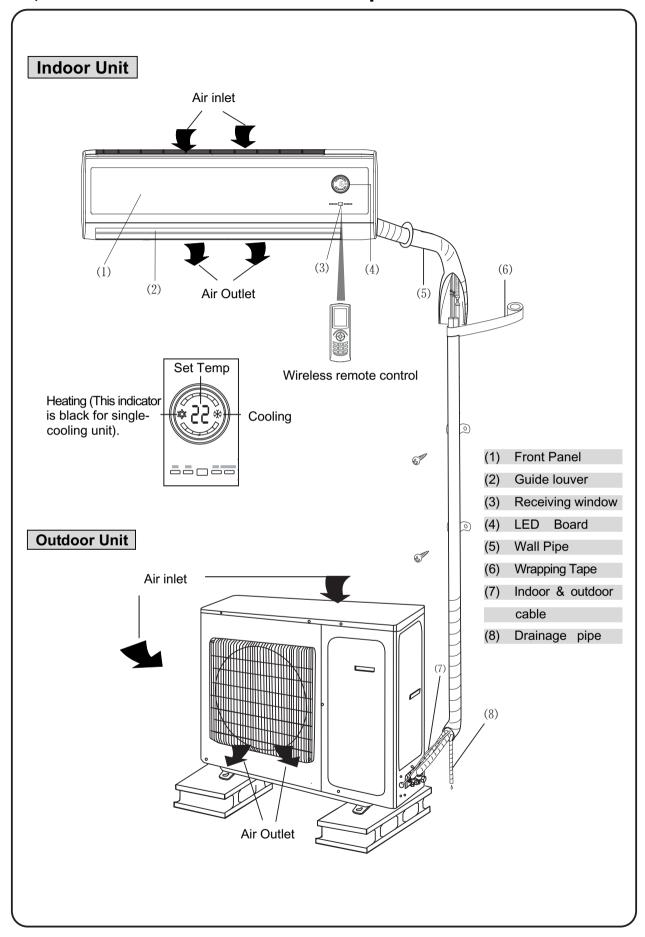
#### ★ The conditions of unit can't normally run

The following temperature range protection device may act, that may cause stop running.

|      | Outdoor temp above $24^{\circ}\mathrm{C}$ |                   | Outdoor temp above $43^{\circ}\text{C}$ |                  |   |
|------|---|-------------------|---|------------------|---|
| "HE/ | Outdoor temp below −7 °C                  | "COOL"<br>running |   | "DRY"<br>running | Indoor temp. below $18^{\circ}\mathrm{C}$ |
|      | Indoor temp. above 27 °C                  |                   | Indoor temp. below $21^{\circ}\text{C}$ |                  | ,   |

Under the relative humidity above 80% (doors and windows opened) when cooling or dihumidifying for a long time, there will be dew drip off near the air vent.

# ◆ Names and functions of each part

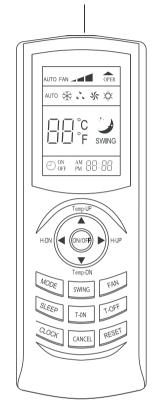




#### Name and function of wireless remote control

Note: Be sure that there are no obstructions between receiver and remote controler; Don't drop or throw the remote control; Don't let any liquid in the remote control and put the remote control directly under the sunlight or any place where is very hot.

#### Signal transmitter



Remote control

### MODE button

#### **MODE** button

When the unit is turned on, can select AUTO, COOL, DRY and FAN or HEAT mode.

# SLEEP SLEEP button

#### **SLEEP** button

In COOL, DRY, HEAT mode, press this button once to turn on the SLEEP button, when repress it once more to turn it off.

AUTO

L DRY

☆ COOL

₩ FAN

☼ HEAT

(only for cooling and heating unit)

# ON/OFF button

#### **ON/OFF** button

Press it to turn on the unit, repress it to turn off the unit.

#### **FAN**

#### **FAN** button

#### **FAN** button

When the unit is turned on, in AUTO, COOL, FAN, HEAT modes, press this button can select AUTO FAN, LOW, MED, HIGH fan speed, in DRY mode, the fan speed is LOW speed, the fan speed in all modes have memory function.

#### SWING

#### **SWING** button

#### **SWING** button

When the unit is turned on, press this button, the SWING function is active, when repressed, it will turned off; When press this button twice continuously, the ON, OFF of controller light function will shift once.

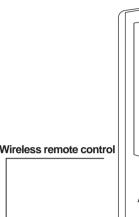
If turn off the light button (At light turned on, continuously press the swing button twice within 1 second to turn off the light; At light turned off, continuously press the swing button twice within 1 second to turn on the light), that all the symbols except the running symbol will be turned off; If the sleep operation has been set up, that all symbols except the running symbol will be turned off.

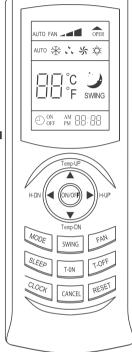


#### Operation of wireless remote control

#### Names and functions of wireless remote control

This wireless remote control is universal, and it could be used for many units, some buttons of this control which are not available to this unit will not be described below.





**CLOCK** 

#### **CLOCK** button

#### **CLOCK** button

Press this button once, the indicator flashes, and enter into clock adjusting state. In clock adjusting state, when press H-UP once, the unit order of minute will be increased 1, when press 1 more seconds continuously, e ch ten minutes will be increased 1 in each 0.5 second, When press H-DOWN once, the unit order of minute will be decreased 1, when press 1 more seconds continuously, each ten minutes will be decreased 1 in each 0.5 second. When adjusting has been finished, repress CLOCK again to affirm.

TIMER OFF

#### TIMER OFF button

**TIMER OFF** button Press this button once enter into the TIMER OFF setting.

TEMP.

#### TEMP. Adjusting button

**TEMP. Adjusting**, the temp. in In COOL, DRY,FAN or HEAT modes, press these two buttons, could set the temp., the setting range is 16°C-30°C all modes have the memory function.

TIMER ON I

#### TIMER ON button

#### TIMER ON button

Press this button once, enter into TIMER ON setting, the timer indicator starts to flash, when press the H-UP button, the time of timer on will be increased 1 minute, when continuously press 1 second or more, each ten minutes will be increased 1 minute, in each 0.5 second, when press H-DOWN, the time will be decreased 1 minute, when continuously press 1 second or above, in each 0.5 second, each ten minutes will be decreased 1 minute, and it runs at 12hour circulation.

**RESET** 

#### **RESET button**

#### **RESET** button

Press this button once, the control will reset.

**CANCEL** 

#### **CANCEL button**

#### **CANCEL** button

Press this button once, to cancel all timer setting.

#### Guide for operation procedure-Optional operation

#### The general procedure:

- 1. After powered on, there is a warning tone sound by buzzer, all patterns displayer of indoor unit displayed, a few seconds later, all the display will automatically turned off, except the POWER/RUN light, The POWER/RUN running light turns red, the unit is await.( NOTE: Each time when power on or receive the signals from the wireless remote control, the buzzer will sound)
- 2. Press ON/ OFF button on the wireless remote control, POWER/ RUN indicator turns green, and display the running mode and setting temp. etc, the unit starts to run.(NOTE: if set the SLEEP function or turn off the light button, all the displays will be turned off except the POWER/ RUN indicator.
- 3. Press MODE, select the desirable running modes.
- 4. When press SWING button, the guide louver will swing automatically, when repressed the button, it will stop.
- 5. Press FAN button, set the fan speed.
- 6. When press Temp-UP/ Temp-DN the button, to set the desired temp.

#### The selected procedure:

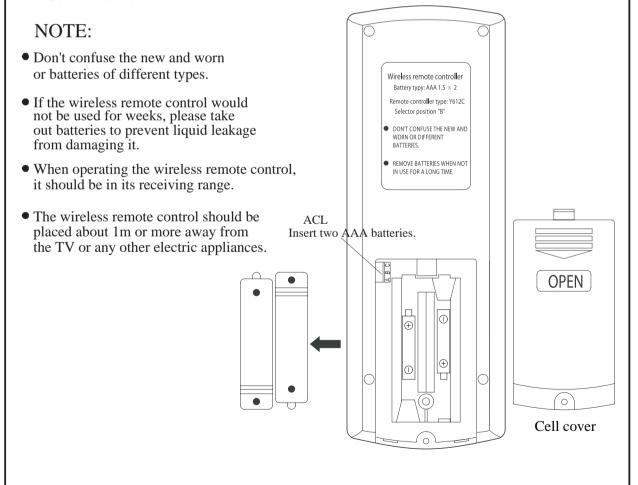
- 7. Press SLEEP button, to set the sleep.
- 8. Press T-OFF/T-ON button, then press H-UP/H-DN button, to set the schedule time of turning on or turning off.

Note: When select the AUTO mode, the unit can choose the suitable running modes, automatically, and can obtain the comfortable effect.

#### Change the batteries

The wireless remote control adopts two AAA alkaline dry cells.

- 1. Slide the cell cover downward to take out the worn cells, then change two new ones.( note to the correct polarity.)
- 2. Cover the cell cover.





#### Caution

- Turn power off and pull out the power plug before cleaning air conditioner, or it may cause electric shock.
- · Never sprinkle water on the indoor unit and the outdoor unit for cleaning because it can cause an electric shock.
- Volatile liquid (e.g. thinner or gasoline) will damage the air conditioner. (So wipe the units with a dry soft cloth, or a cloth slightly moistened with water or cleanser.)

#### Clean the front panel (make sure to take it off before cleaning)

1 Take off the front panel

Along the direction of arrowhead to lift the front panel up, meanwhile to hold both slots of the front panel and take it out forcibly and then can take it off.



Clean with a soft brush, water and neutral detergent, and then to dry it in the shade.

(3) Install the front panel

Place two supporters of the front panel into the slots, along the direction of arrowhead to cover and clasp the front panel. As show in Fig.4(a,b)



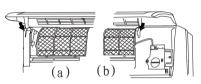


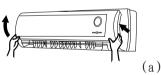
Fig.4

#### Clean the air filter (Recommended once every three months)

Note: If dust is much more around the air conditioner, the air filters should be cleaned many times. After taking off the filter, don't touch the fin of indoor unit, in order to avoid hurt your fingers.

1 Take down the air filter

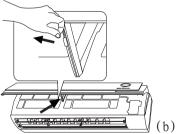
At the slot of surface panel to open an angle, pull the air filter downward and take it out, please see the Fig. 5(a,b,c).

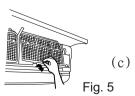


2 Clean the air filter

To clean the dust adhering to the filters, you can either use a vacuum cleaner, or wash them with warm water (the water with the neutral detergent should below 45°C), and dry it in the shade.

Note: Never use water above 45°C to clean, or it can cause deformation or discoloration. Never parch it by fire, or can cause a fire or deformation.





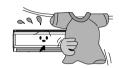
(3) Insert the air filter

Reinsert the filters along the direction of arrowhead, and then to cover the cover and clasp it.



#### Check before use

- 1 Be sure that nothing obstructs the air outlet and intake vents.
- 2 Check that whether ground wire is properly connected or not.
- (3) Check that whether the batteries of air conditioner are changed or not.
- (4) Check that whether the installation stand of the outdoor unit is damaged or not. If damaged, please contact the dealer.





#### Maintain after use

- ① Turn main power off.
- 2 Clean the filter and indoor and outdoor units' bodies.
- 3 Clear dust and obstructions from the outdoor unit.
- 4 Repaint the rubiginous place on the outdoor unit to prevent it from spreading.





CAUTION

Don't attempt to repair the air conditioner by yourself, it can cause an electric shock or fire. Please check the following items before asking for repair, it can save your time and money.

| Phenomenon  | Troubleshooting  |
|---|--|
| Not operate immediately when the air conditioner is restarted.            | Once the air conditioner is stopped, it will not operate in approximately 3minutes to protect itself.  |
| There's unusual smell blowing from the outlet after operation is started. | The unit has no peculiar smell by itself. If has, that is due to the smell accumulated in the ambient. Solution method: Cleaning the filter(refer to P10). If problem still has, so need to clean air conditioner.(please contact with CLIMATE CONTROL authorized maintenance center.) |
| Sound of water flow can be heard during the operation.                    | The air conditioner is started, when it is running the compressor started or stopped running, or the unit is stopped, sometimes there is swoosh or gurgle, the sound is due to refrigerant flowing they are not malfunctions.  |
| In COOL mode, sometimes the mist emitted from the air outlet vent.        | When the indoor temperature and humidity are very high, this phenomenon would happen. This is caused by the room air is swiftly cooled down. After running for a while, indoor temperature and humidity will fall down, the mist will die away.  |
| Creaking noise can be heard when start or stop the unit.                  | This is caused by the deformation of plastic due to the changes of temperature.  |



| Phenomenon                               | Troubleshooting   |
|--|---|
| The unit can not run                     | <ul> <li>Has the power been shut down?</li> <li>Is the circuit protection device tripped off or not?</li> <li>Is voltage higher or lower?</li> <li>(Tested by professionals)</li> <li>Is the Timer correctly used?</li> </ul>   |
| Cooling(Heating) efficiency is not good. | <ul> <li>Is Temp. setting suitable?</li> <li>Were inlet and outlet vents obstructed?</li> <li>Is filter dirty?</li> <li>Are the windows and doors clothed?</li> <li>Did Fan speed set at low speed?</li> <li>Is there any heat sources in the room?</li> </ul>  |
| Wireless remote control is not available | <ul> <li>The unit is interfered by abnormal or frequent functions switchover occasionally the controller cannot operate. At this time, you need to pull out of the plug, and reinsert it.</li> <li>Is it in its receiving range? Or obstructed?</li> <li>To check the voltage in wireless remote control inside is charged, otherwise to replace the batteries.</li> <li>Whether the wireless remote control is damaged.</li> </ul> |
| If water leakage in the room             | <ul> <li>The air humidity is on the high side.</li> <li>Condensing water over flowed.</li> <li>The connection position of indoor unit drainage pipe is loosed.</li> </ul>   |
| If water leakage in outdoor unit         | <ul> <li>When the unit is running in COOL mode, the pipe and connection of pipe would be condensed due to the water cooled down.</li> <li>When the unit is running in Auto Defrosting mode, the ice thawed and flowed out.</li> <li>When the unit is running in HEAT mode, the water adhered on heat exchanger dripped off.</li> </ul>  |
| Noise from indoor unit emitted.          | <ul> <li>The sound of fan or compressor relay is switching on or off.</li> <li>When the defrosting is started or stop running, it will sound. That is due to the refrigerant flowed to the reverse direction.</li> </ul>  |



| Phenomenon                     | Troubleshooting  |
|--------------------------------|--|
| Indoor unit cannot deliver air | <ul> <li>In HEAT mode, when the temperature of indoor heat exchanger is very low, that will stop deliver air in order to prevent blowing cool air.</li> <li>In HEAT mode, when the outdoor temperature is low or high humidity, there are much frost be formed on the outdoor heat exchanger, that the unit will automatically defrost, indoor unit stop blowing air for 3-12min. During the defrosting, there is water flowing out or vapor be produced.</li> <li>In dehumidifying mode, sometimes indoor fan will stop, in order to avoid condensing water be vaporized again, restrain temperature rising.</li> </ul> |
| Moisture on air outlet vent    | If unit is running under the high humidity for a long time, the moisture will be condensed on the air outlet grill and drip off.   |



Immediately stop all operations and plug out, contact the dealer in following situations.

- ▲ There is harsh sound during operation.
- ▲ The terrible odors emitted during operation.
- ▲ Water is leaking in the room.
- ▲ Air switch or protection switch often breaks.
- ▲ Carelessly splash water or something into air conditioner.
- There is an abnormal heat in power supply cord and power plug.

Stop running and pull out of the plug.



#### Installation service- Notices for installation



#### **Important Notices**

- 1. The unit installation work must be done by qualified personnel according to the local rules and this manual.
- 2. Before installating, please contact with local authorized maintenance center, if unit is not installed by the authorized maintenance center, the malfunction may not solved, due to discommodious contacts.
- 3. When removing the unit to the other place, please firstly contact with the authorized CLIMATE CONTROL Maintenance Center in the local area.
- 4. A air switch having a contact separation of at least 3mm in all poles should be fixed in fixed wiring.
- 5. The appliance shall be installed in accordance with national wiring regulation.

#### **Basic Requirements For Installation Position**

# Install in the following place may cause malfunction. If it is unavoidable contact with service center please:

- Place where strong heat sources, vapors, flammable gas or volatile objuct are emitted
- Place where high-frequency waves are generated by radio equipment, welders and medical equipment.
- Place where a lot of salinities such as coast exists.
- Place where the oil (machine oil) is contained in the air.
- Place where a sulfured gas such as the hot spring zones is generated.
- Other place with special circumstance.

#### Indoor Unit Installation Position Selection

- 1. The air inlet and outlet vent should be far from the obstruction, make sure that the air can be blown through the whole room.
- 2. Select a position where the condensing water can be easily drained out, and the place is easily connected for outdoor unit.
- 3. Select a location where the children can not reach.
- 4. Can select the place where is strong enough to withstand the full weight and vibration of the unit. And will not increase the noise.
- 5. Be sure to leave enough space to allow access for routine maintenance. The height of the installed location should be 250cm or more from the floor.
- 6. Select a place about 1m or more away from TVset or any other electric appliances.
- 7. Select a place where the filter can be easily taken out.
- 8. Make sure that the indoor unit installation should accord with installation dimension diagram requirements. (on page 17)
- 9. The appliance shall not be installed in the laundry.
- 10. If the supply cord is damaged, it must be replaced by the manufacturer or its service agent or a similarly qualified person in order to avoid a hazard.
- 11. The temperature of refrigerant circuit will be high, please keep the interconnection cable away from the copper tube.
- 12. Avoid a location where there is heat source high humidity or inflammable gas.
- 13. Do not use the unit in the immediate surroundings of a laundry a bath a shower or a swimming pool.

#### **Outdoor Unit Installation Position Selection**

1. Select a location from which noise and outflow air emitted by unit will not inconvenience neighbors, animals, plants.

# Notices for installation

- 2. Select a location where there should be sufficient ventilation.
- 3. Select a location where there should be no obstructions cover the inlet and outlet vent.
- 4. The location should be able to withstand the full weight and vibration of the outdoor unit and permit safe installation.
- 5. Select a dry place, but do not expose under the direct sunlight or strong wind.
- 6. Make sure that the outdoor unit installation dimension should accord with installation dimension diagram, convenient for maintenance, repair. (on page 17)
- 7. The height difference of connecting the tubing within 5m, the length of connecting the tubing within 10m.
- 8. Select a place where it is out of reach for the children.
- 9. Select a place where will not block the passage and do not influence the city appearance.

#### Safety Requirements For Electric Appliances

- 1. The power supply should be used the rated voltage and AC exclusive circuit, the power cable diameter should be satisfied.
- 2. Voltage applying range: the normal running range is rated voltage 90%-110%.
- 3. Don't drag the power cable emphatically.
- 4. It should be reliably earthed, and it should be connected to the special earth device, the installation work should be operated by the professional.

The air switch must have the functions of magnetic tripping and heat tripping, in order to protect the short circuit and overloading.

5. The min. distance from the unit and combustive surface is 1.5m.

#### Note:

• In the family, the live wire, neutral wire in the power supply socket that should be connected as the right figure, position cannot be wrong connected, and should reliably connected, there should be not short circuit in the inside.
Neutral wire (N)

Earth ( ( ) Live wire (L)

wrong connection may cause fire.

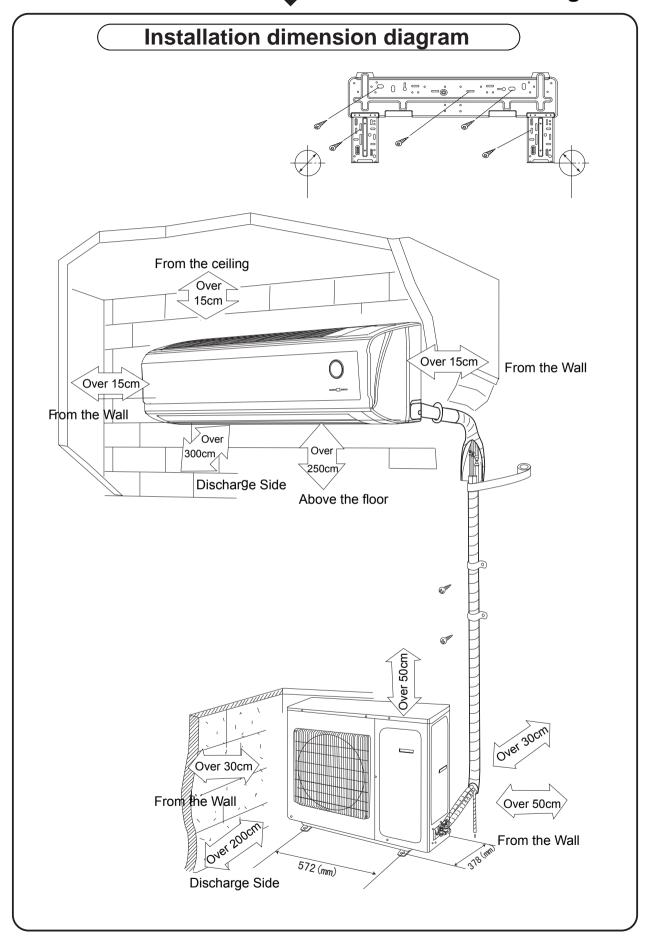
#### **Earthing requirements**

- 1. Air conditioner is type I electric appliance, thus please do conduct reliable earthing measure.
- 2. The yellow-green two-color wire in air conditioner is earthing wire and cannot be used for other propose. It cannot be cut off and be fix it by screw, otherwise it would cause
- 3. electric shock.

The user power must offer the reliable earthing terminal. Please don't connect the earthing wire with the following place:

- ①Tap water pipe ②Gas pipe ③Contamination pipe
- 4)Other places that professional personnel consider them unreliable.

# **◆** Installation dimension diagram

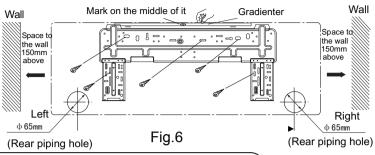


# **•**

## **Installation Service-Install indoor unit**

#### Install the rear panel

- 1. Always mount the rear panel horizontally. As the water drainage pipe at the left, when adjusting the rear panel, this side should not be too high; the right side should be slightly high
- 2. Fix the rear panel on the selected location.
- Be sure that the rear panel has been fixed firmly enough to withstand the weight of an adult of 60kg, furthermore, the weight should be evenly shared by each screw.



# Install the piping hole

- 1. Make the piping hole (  $\Phi$  65)in the wall at a slight downward slant to the outdoor side. At Fig.6.
- 2. Insert the piping-hole sleeve into the hole to prevent the connection piping and wiring from being damaged when passing through the hole.

#### Install the water drainage pipe

- 1. For well draining, the drain hose should be placed at a downward slant.
- 2. Do not wrench or bend the drain hose or flood its end by water.
- 3. When the long drainage hose passing through indoor, should wrap the insulation materials.

# Wrenched Bent Flooded

Indoor

Wall pipe

Outdoor

Seal pad

Ø65

Protection sleeve pipe

#### Connect indoor and outdoor electric wires

- 1. Open the front panel upwardly;
- Screw off the fixing screw of cover plate and screw off cover plate (As show in Fig. 7)
- 3. Put the power connection cable through the back of indoor unit wire hole and take it ou
- 4. Connect the blue wire of power connection cord to the terminal on "N(1)", the black one to "2", the brown one to "3",the yellow-green one earth wire to (As shown in Fig. 8)
- 5. Put the power connection cable the section, which with sheath into wire groove, and cov the cover plate, screw on the fixing screw tighten the connection wire.
- 6. Cover the front panel cover.
- 7. For the cooling and heating unit, signal control wire can be passed through the connection of connector and indoor unit, and use the wire clip that is under the body case, tighten the signal control wire (As show in Fig. 9)

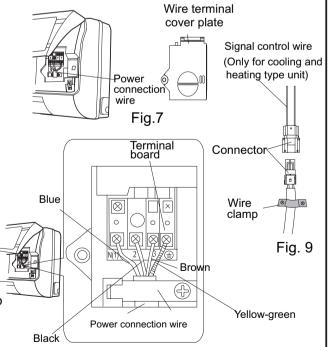


Fig. 8

#### NOTE:

When connecting the electric wire if the wire length is not enough, please contact with the authorized service shop to buy a exclusive electric wire that is long enough and the joint on the wire are not allowed.

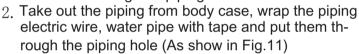
- The electric wiring must be correctly connected, wrong connection may cause spare parts malfunction.
- Tighten the terminal screw in order to prevent loose.
- After tighten the screw, slightly pull the wire and confirm whether is it firm or not.
- If the earth wire is wrong connection, that may cause electric shock.
- The cover plate must be fixed, and tighten the connection wire, if it is poor installed, that the dust, moisture may enter in or the connection terminal will be affected by outside force, and will cause fire or elelctric shock.

#### Install the indoor unit

- ●The piping can be lead out from right, right rear, left, left rear.
- 1. When routing the piping and wiring from the left or right side of indoor unit, cut off the tailings from the chassis in necessary (show in Fig.10).

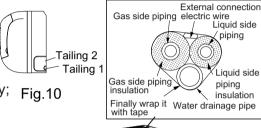
(1) Cut off the tailings 1 when routing the wiring only; Fig.10

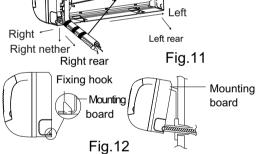
(2) Cut off the tailings 1 and tailings 2 when routing both the wiring and piping.



3. Hang the mounting slots of the indoor unit on the upper tabs of the rear panel and check if it is firm enough. (As show in Fig.12)

4. The height of the installed location should be 2.5m or more from the floor.



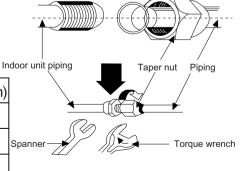


#### Install the connection pipe

- 1. Align the center of the piping flare with the relevant valve.
- 2. Screw in the flare nut by hand and then tighten the nut with spanner and torque wrench refer to the following.

Tightening torque table

| Hex nut diameter | Tightening torque table(N·m) |  |
|------------------|------------------------------|--|
| Φ6               | 15~20                        |  |
| Ф9. 52           | 31~35                        |  |
| Ф12              | 50~55                        |  |



NOTE: Firstly connect the connection pipe to indoor unit, then to outdoor unit; pay attention to the piping bending, do not damage the connection pipe; the joint nut couldn't tighten too much, otherwise it may cause leakage.

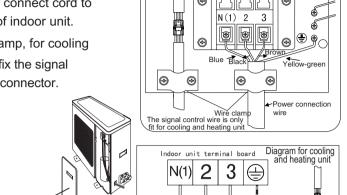
# ◆ Installation service- Install outdoor unit

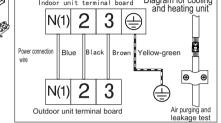
#### **Electric wiring**

- 1. Remove the front side plate.
- 2. Take off wire clamp. Connect and fix power connect cord to terminal of line bank. Wiring should fit that of indoor unit.
- 3. Fix the power connection cable with wire clamp, for cooling and heating unit, then use the wire clamp to fix the signal control wire, then connect the corresponding connector.
- 4. Ensure wire has been fixed well.



- Wrong wiring may cause spare parts malfunction.
- After the cable fixed, make sure there should be a free space between the connection and fixing place on the lead wire.

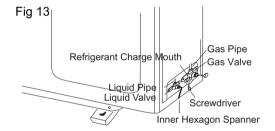


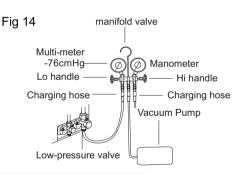


#### Air purging and leakage test

Front side plate

- 1. Remove the nut cover at the shutoff valve.
- Align with the center of the fitting pipe and manually tighten the conical nut sufficiently.
- 3. Use spanner to tighten the conical nut.
- 4. Remove the liquid valve cap, the gas valve cap and the nut of refrigerant charging mouth.
- Use inner hexagon spanner to twist off the liquid valve body and at the same time use screwdriver to open the valve core of the liquid valve. Now gas shall flow out.
- 6. After gas continues flowing out for about 15 second and refrigerant gas begins to flow out, close the valve core and tighten the nut of refrigerant charge mouth.
- 7. Completely open the valve body of the liquid valve and the gas valve. (See Fig 13)
- 8. Turn and tighten the valve cap, then use soap water or a leak detector to check if there is gas leakage at the outdoor and indoor units and the pipeline connections.
- 9. If conditions permit, use a vacuum pump to exhaust air in the unit from the valve core. (See Fig 14)

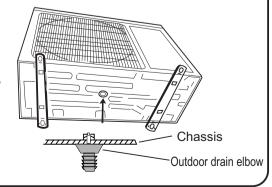




#### Outdoor condensation drainage (Heat pump type only)

When the unit is heating, the condensing water and defrosting water can be drained out reliably through the drain hose.

Installation: Install the outdoor drain elbow in  $\emptyset$  25 hole on the base plate,and joint the drain hose to the elbow, so that the waste water formed in the outdoor unit can be drained out to a proper plate.



# Check after installation and test operation

#### **Check after installation**

| Items to be checked  | Possible malfunction                                  |
|--|---|
| Has it been fixed firmly?  | The unit may drop, shake or emit noise.               |
| Have you done the refrigerant leakage test?                                    | It may cause insufficient cooling(heating) capacity.  |
| Is heat insulation sufficient?   | It may cause condensation and dripping.               |
| Is water drainage well?  | It may cause condensation and dripping.               |
| Is the voltage in accordance with the rated voltage marked on the nameplate?   | It may cause electric malfunction or damage the part. |
| Is the electric wiring and piping connection installed correctly and securely? | It may cause electric malfunction or damage the part. |
| Has the unit been connected to a secure earth connection?                      | It may cause electrical leakage.                      |
| Is the power cord specified?   | It may cause electric malfunction or damage the part  |
| Is the inlet and outlet been covered?  | It may cause insufficient cooling(heating) capacity.  |
| Has the length of connection pipes and refrigerant capacity been recorded?     | The refrigerant capacity is not accurate.             |

# **Test Operation**

#### 1. Before test operation

- (1) Do not switch on power before installation is finished completely.
- (2) Electric wiring must be connected correctly and securely.
- (3) Cut-off valves of the connection pipes should be opened.
- (4) All the impurities such as scraps and thrums must be cleared from the unit.

#### 2. Test operation method

- (1) Switch on power, press "ON/OFF" button on the wireless remote control to start the operation.
- (2) Press MODE button, to select theAuto, COOL, HEAT, FAN and Heat to check whether the operation is normal or not .